

10/764,529

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NEWS 8 SEP 22 MATHDI to be removed from STN

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MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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FILE 'HOME' ENTERED AT 19:44:48 ON 26 SEP 2005

=> file reg

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:45:00 ON 26 SEP 2005

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STRUCTURE FILE UPDATES: 25 SEP 2005 HIGHEST RN 863878-84-6
DICTIONARY FILE UPDATES: 25 SEP 2005 HIGHEST RN 863878-84-6

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
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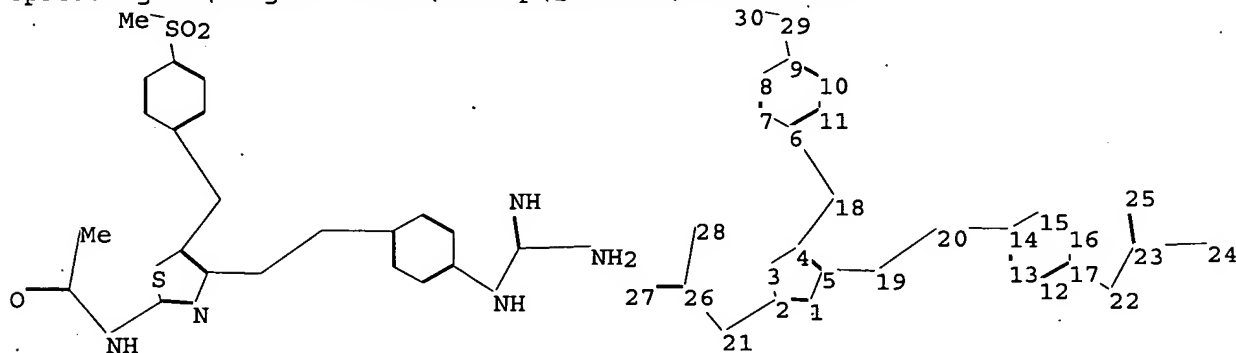
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

Experimental and calculated property data are now available. For more
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10764529.str



chain nodes :

18 19 20 21 22 23 24 25 26 27 28 29 30

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

chain bonds :

2-21 4-18 5-19 6-18 9-29 14-20 17-22 19-20 21-26 22-23 23-24 23-25
26-27 26-28 29-30

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ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14
14-15 15-16 16-17

exact/norm bonds :

1-2 1-5 2-21 17-22 21-26 22-23 23-24 23-25 26-27

exact bonds :

2-3 3-4 4-5 4-18 5-19 6-18 9-29 14-20 19-20 26-28 29-30

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17

isolated ring systems :

containing 1 : 6 : 12 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 19:45:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 5 TO 234

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 19:45:25 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 58 TO ITERATE

100.0% PROCESSED 58 ITERATIONS

4 ANSWERS

SEARCH TIME: 00.00.01

L3 4 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

161.33

161.54

FILE 'CAPLUS' ENTERED AT 19:45:31 ON 26 SEP 2005

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FILE COVERS 1907 - 26 Sep 2005 VOL 143 ISS 14
FILE LAST UPDATED: 25 Sep 2005 (20050925/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 2 L3

=> d l4 ibib hitstr abs 1-2

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:857384 CAPLUS

DOCUMENT NUMBER: 141:350160

TITLE: treatment of vascular hyperpermeable disease using acylaminothiazoles and related compounds as vascular adhesion protein-1 (VAP-1) inhibitors.

INVENTOR(S): Ueno, Ryuji; Nagashima, Akira; Inoue, Takayuki; Ohkubo, Mitsuru; Yoshihara, Kousei

PATENT ASSIGNEE(S): Sucampo Ag, Switz.; Fujisawa Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 269 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2004087138 | A1 | 20041014 | WO 2004-JP4596 | 20040331 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

PRIORITY APPLN. INFO.: US 2003-458370P P 20030331

OTHER SOURCE(S): MARPAT 141:350160

IT 737824-54-3P 737824-56-5P 737824-57-6P
737826-15-2P

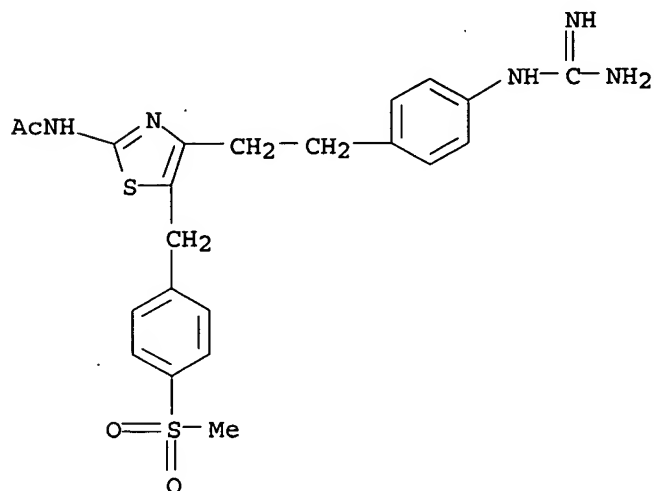
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(treatment of vascular hyperpermeable disease using acylaminothiazoles and related compds. as vascular adhesion protein-1 (VAP-1) inhibitors)

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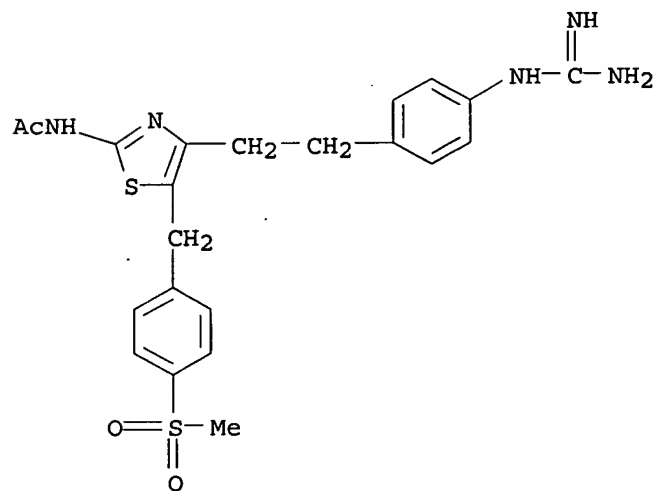
RN 737824-54-3 CAPLUS

CN Acetamide, N-[4-[2-[4-[(aminoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)



RN 737824-56-5 CAPLUS

CN Acetamide, N-[4-[2-[4-[(aminoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]-, monohydrochloride (9CI) (CA INDEX NAME)

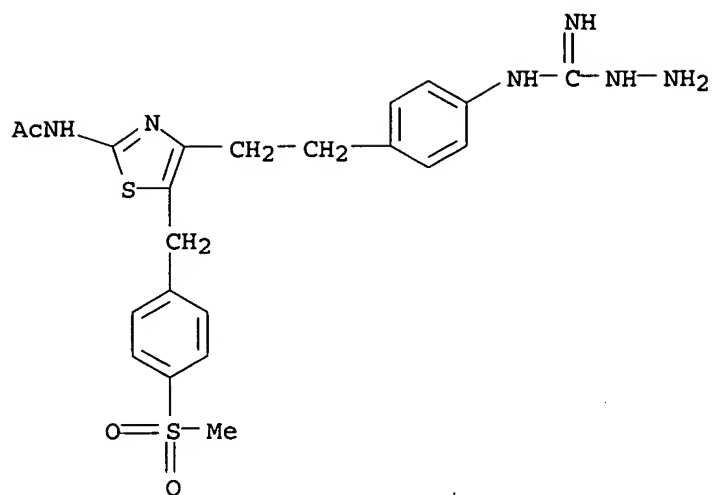


● HCl

RN 737824-57-6 CAPLUS

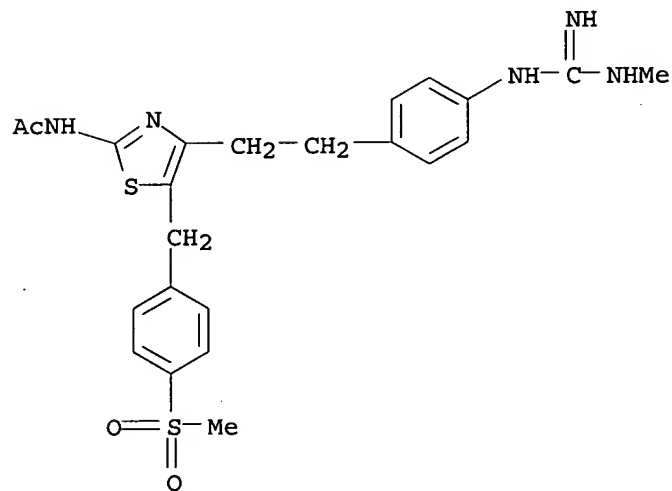
CN Acetamide, N-[4-[2-[4-[(hydrazinoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)

10/764,529

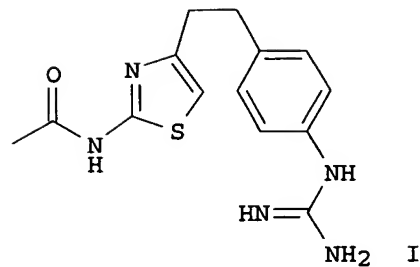


RN 737826-15-2 CAPLUS

CN Acetamide, N-[4-[2-[4-[[imino(methylamino)methyl]amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)



GI



AB A method for treating a vascular hyperpermeable disease (except macular edema), comprises administration of a vascular adhesion protein-1 (VAP-1) inhibitor in an amount sufficient to treat said patient for said disease. Thus, N-[4-[2-(4-aminophenyl)ethyl]-1,3-thiazol-2-yl]acetamide (preparation given) was refluxed with HCl and cyanamide in EtOH for 26 h to give title compound (I). I inhibited human plasma VAP-1 (SSAO) with IC₅₀ = 0.15 μ M.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:648516 CAPLUS

DOCUMENT NUMBER: 141:190785

TITLE: Preparation of thiazole derivatives as VAP-1 inhibitors for treatment of macular edema and other VAP-1 associated diseases

INVENTOR(S): Inoue, Takayuki; Tojo, Takashi; Morita, Masataka; Ohkubo, Mitsuru; Yoshihara, Kousei; Nagashima, Akira

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 268 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004067521 | A1 | 20040812 | WO 2004-JP708 | 20040127 |
| W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI | | | | |
| US 2004259923 | A1 | 20041223 | US 2004-764529 | 20040127 |
| PRIORITY APPLN. INFO.: | | | US 2003-442509P | P 20030127 |
| | | | US 2003-458369P | P 20030331 |
| | | | US 2003-517377P | P 20031106 |

OTHER SOURCE(S): MARPAT 141:190785

IT 737824-54-3P, N-[4-[2-[4-[[Amino(imino)methyl]amino]phenyl]ethyl]-

5-[4-(methylsulfonyl)benzyl]thiazol-2-yl]acetamide 737824-56-5P,

N-[4-[2-[4-[[Amino(imino)methyl]amino]phenyl]ethyl]-5-[4-

(methylsulfonyl)benzyl]thiazol-2-yl]acetamide hydrochloride

737824-57-6P, N-[4-[2-[4-[[Hydrazino(imino)methyl]amino]phenyl]eth

yl]-5-[4-(methylsulfonyl)benzyl]thiazol-2-yl]acetamide

737826-15-2P, N-[4-[2-[4-[[Imino(methylamino)methyl]amino]phenyl

]ethyl]-5-[4-(methylsulfonyl)benzyl]thiazol-2-yl]acetamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

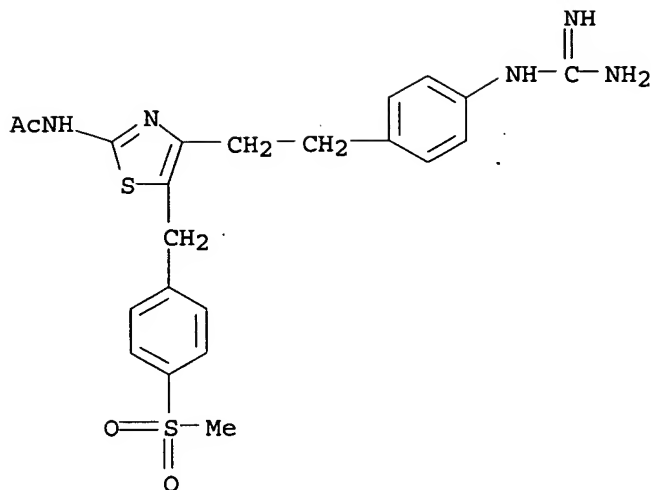
(Uses)

(VAP-1 inhibitor; preparation of thiazole derivs. as VAP-1 inhibitors for treatment of macular edema and other VAP-1 associated diseases)

RN 737824-54-3 CAPLUS

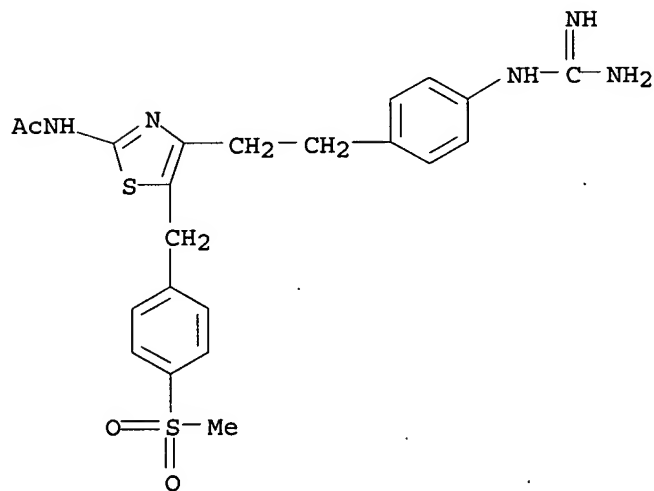
CN Acetamide, N-[4-[2-[4-[(aminoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)

10/764,529



RN 737824-56-5 CAPLUS

CN Acetamide, N-[4-[2-[4-[(aminoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]-, monohydrochloride (9CI) (CA INDEX NAME)

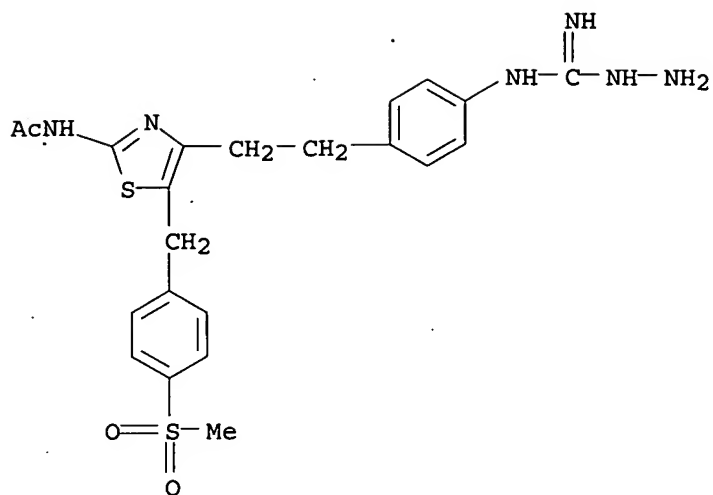


● HCl

RN 737824-57-6 CAPLUS

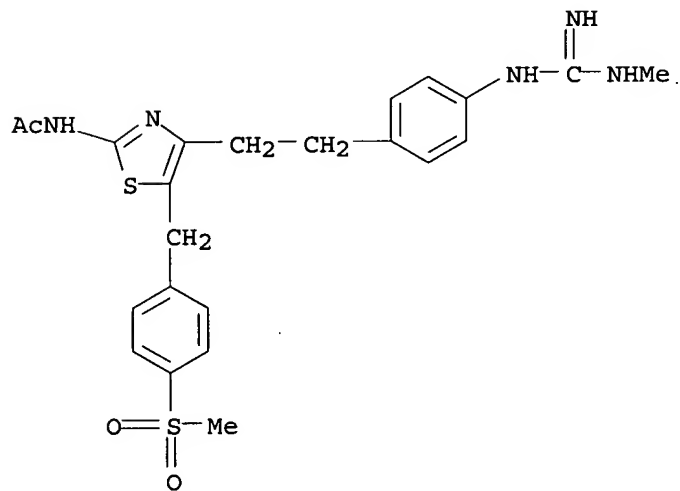
CN Acetamide, N-[4-[2-[4-[(hydrazinoiminomethyl)amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)

10/764,529

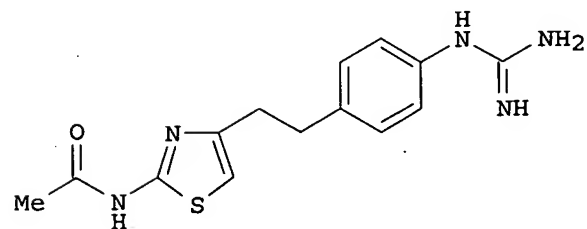


RN 737826-15-2 CAPLUS

CN Acetamide, N-[4-[2-[4-[[imino(methylamino)methyl]amino]phenyl]ethyl]-5-[[4-(methylsulfonyl)phenyl]methyl]-2-thiazolyl]- (9CI) (CA INDEX NAME)



GI



II

AB Title compds. of formula R1NHXYZ [I; wherein R1 = acyl; X = a bivalent (un)substituted thiazole; Y = a bond, alkylene, alkenylene, COHN; Z = 2-aminobenzimidazolyl, C6H4-R2; R2 = ABDE; A = a bond, alkylene, NH, SO2; B = a bond, alkylene, CO, O; D = a bond, alkylene, NH, CH2NH; E = (un)protected amino, N=CH2, dihydrothiazol-2-yl, dihydroimidazol-2-yl, C(=NH)R3; R3 = H, alkyl(thio), NHR4; R4 = H, NH2, alkyl; and pharmaceutically acceptable salts thereof] were prepared as vascular adhesion protein-1 (VAP-1) inhibitors. For example, cycloaddn. of 3-chloro-2-oxopropyl acetate and thiourea in EtOH gave (2-amino-1,3-thiazol-4-yl)methyl acetate•HCl, which was amidated with acetyl chloride using pyridine in CH2Cl2. Deprotection of [2-(acetyl amino)thiazol-4-yl]methyl acetate using K2CO3 in MeOH, followed by reaction of the resulting alc. with MnO2 in MeOH/CHCl3 provided N-(4-formylthiazol-2-yl)acetamide. Coupling of the aldehyde with 1-(bromomethyl)-4-nitrobenzene in the presence of PPh3 and t-BuOH in DMF gave N-[4-[(Z)-2-(4-nitrophenyl)ethenyl]thiazol-2-yl]acetamide, which was reduced to the amine with Pd/C in MeOH/THF/AcOH. Finally, coupling of the amine with cyanamide in the presence of HCl in EtOH/EtOAc afforded II. The latter inhibited VAP-1 enzyme (SSAO) activity in both human and rat plasma (IC50 = 0.15 μ M and 0.012 μ M, resp.), but not the enzyme activities of other amine oxidases (IC50 >100 μ M), such as human platelet monoamine oxidase (MAO) and cloned diamine oxidase (DAO, histaminase). Treatment of diabetic rats daily with II (10 mg/kg/ s.c. u.i.d.) improved their ocular permeability in comparison with the diabetic control group (vitreous/plasma ratio of fluorescein concns. = $5.39 \pm 0.73 \times 10^{-3}$ and $8.93 \pm 1.14 \times 10^{-3}$, resp.). Thus, I and their pharmaceutical compns. are useful for preventing or treating VAP-1 associated diseases, especially macular edema (no data).

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

10.33

171.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-1.46

-1.46

STN INTERNATIONAL LOGOFF AT 19:45:57 ON 26 SEP 2005